AMENDMENTS TO THE CLAIMS

Please cancel Claims 2-9, 12, 19-23 and 26, and amend Claims 1, 10, 11, 16 and 18 as shown in the following listings of the claims:

1. (Currently amended) A method of inhibiting agonist-induced down-regulation of a G protein-coupled receptor, the method comprising contacting cells comprising the G protein-coupled receptor with ~~an effective amount of an inhibitor~~ a G protein-coupled receptor associated sorting protein 1 ("GASP1") polypeptide comprising the amino acid sequence of SEQ ID NO: 8 in an amount sufficient to reduce agonist-induced down-regulation of the G protein-coupled receptor in the cells~~, wherein:~~

~~the G protein-coupled receptor is one that specifically binds to a polypeptide having the amino acid sequence of GASP SEQ ID NO:2 (GASP1) or GASP SEQ ID NO:6 (GASP2)~~;

~~the inhibitor reduces specific binding of the G protein-coupled receptor to said polypeptide; and~~

~~an effective amount is an amount sufficient to reduce agonist-induced down-regulation of the G protein-coupled receptor in the cells~~.

2.-9. (Canceled).

10. (Currently amended) The method of claim ~~2~~ 1, wherein said contacting comprises administering a composition comprising the polypeptide to the cells.

11. (Currently amended) The method of claim ~~2~~ 1, wherein said contacting comprises administering a composition comprising a polynucleotide encoding the polypeptide to the cells, whereby said administration results in the expression of the polypeptide.

12. (Canceled).

13. (Original) The method of claim 1, wherein the cells are *in vivo.*

14. (Original) The method of claim 1, wherein the G protein-coupled receptor is selected from the group comprising the delta opioid receptor, the kappa opioid receptor, the D2 dopamine receptor, the D4 dopamine receptor, the beta 2 adrenergic receptor, the NKl (substance P) receptor, the bradykinin Bl receptor, and US28.

15. (Original) The method of claim 14, wherein G protein-coupled receptor is selected from the group comprising the delta opioid receptor, the kappa opioid receptor, the

D2 dopamine receptor, the D4 dopamine receptor, the NK1 (substance P) receptor, the bradykinin B1 receptor, and US28.

16. (Currently amended) The method of claim ~~15~~ 1, wherein said contacting is performed by administering a composition comprising the inhibitor to a subject in need of pain reduction.

17. (Original) The method of claim 1, additionally comprising contacting the cells with an agonist of the G protein-coupled receptor in an amount sufficient to stimulate the G protein-coupled receptor.

18. (Original) A method of enhancing agonist-induced down-regulation of a G protein-coupled receptor, the method comprising contacting cells comprising the G protein-coupled receptor with ~~an effective amount of a polypeptide that~~ a G protein-coupled receptor associated sorting protein 1 ("GASP1) polypeptide comprising the amino acid sequence of SEQ ID NO:2 in an amount sufficient to increase agonist-induced down-regulation of the G protein-coupled receptor in cells~~, wherein:~~

~~the G protein-coupled receptor is one that specifically binds to a polypeptide having the amino acid sequence of GASP SEQ ID NO:2 (GASP1) or GASP SEQ ID NO:6 (GASP2);~~

~~the polypeptide comprises an amino acid sequence that has at least about 70% identity to GASP SEQ ID NO:2 (GASP1) or GASP SEQ ID NO:6 (GASP2) over a comparison window of at least 15 contiguous amino acids; and~~

~~an effective amount is an amount sufficient to increase agonist-induced down-regulation of the G protein-coupled receptor in the cells~~.

19.-23. (Canceled).

24. (Original) The method of claim 18, wherein said contacting comprises administering a composition comprising the polypeptide to the cells.

25. (Original) The method of claim 18, wherein said contacting comprises administering a composition comprising a polynucleotide encoding the polypeptide to the cells, whereby said administration results in the expression of the polypeptide.

26. (Canceled).

27. (Original) The method of claim 18, wherein the cells are *in vivo*.

28. (Original) The method of claim 18, wherein the wherein the G protein-coupled receptor is selected from the group comprising the delta opioid receptor, the kappa opioid receptor, the D2 dopamine receptor, the D4 dopamine receptor, the beta 2 adrenergic receptor, the NK1 (substance P) receptor, the bradykinin B1 receptor, and US28.

29. (Original) The method of claim 18, additionally comprising contacting the cells with an agonist of the G protein-coupled receptor in an amount sufficient to stimulate the G protein-coupled receptor.

30-78. (Canceled)